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ERRATA

Erratum: ''A quantitative analysis of surface deformation by stick/slip atomic force microscopy'' [J. Appl. Phys. 82, 3763 (1997)]

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Some errors were made in the derivation of Eq. (A11). It is written

$$C_{\text{eff}} \equiv \left[-\frac{dF_{\text{lat}}}{dx_s} \right]^{-1} = \left[-\left(\frac{\cos(\alpha)}{H} \right) \frac{\sin(\alpha) + O_F \cos(\alpha)}{C_\theta H O_F + C_{\theta z}} \right]^{-1}, \tag{A11}$$

with

$$O_{\mu,\text{fixed}} = O_F = \frac{C_\theta H \sin(\alpha) - C_{\theta z} \cos(\alpha)}{C_z \cos(\alpha) - C_{\theta z} H \sin(\alpha)}. \tag{A12}$$

It should be

$$C_{\text{eff}} \equiv \left[-\frac{dF_{\text{lat}}}{dx_s} \right]^{-1} = -\left[\frac{C_z \cos^2\alpha - 2 C_{\theta z} H \sin\alpha \cos\alpha + C_\theta H^2 \sin^2\alpha}{C_\theta C_z H^2 - C_{\theta z}^2 H^2} \right]^{-1}. \tag{A11}$$

Because of this, Table I in the main text also changes. The center part reads

Compliances	|Value|	Stiffness	|Value| N/m
$C_\theta = L/Ewt^3$	1.46×10^{8}	$[C_\theta H^2]^{-1}$	486 ± 120
$C_z = L^3/3Ewt^3$	0.76	$[C_z]^{-1}$	1.31 ± 0.33
$C_{\theta z} = L^2/2Ewt^3$	9.15×10^{3}	$[C_{\theta z} H]^{-1}$	29.1 ± 7.3
C_{eff}	2.18×10^{-3}	$[C_{\text{eff}}]^{-1}$	459 ± 110

This part should be written

Compliances	|Value|	Stiffness	|Value| N/m
$C_\theta = 12L/Ewt^3$	1.76×10^{9}	$[C_\theta H^2]^{-1}$	40 ± 9
$C_z = 4L^3/3Ewt^3$	9.16	$[C_z]^{-1}$	0.11 ± 0.03
$C_{\theta z} = 6L^2/2Ewt^3$	11.0×10^{4}	$[C_{\theta z} H]^{-1}$	2.4 ± 0.6
C_{eff}	7×10^{-3}	$[C_{\text{eff}}]^{-1}$	151 ± 34

Therefore, the calculated value of stiffness for TiS_2 as it was calculated in the main text with the help of Eq. (3) changes. This value was given as $(1.1\pm2.0)\times10^{2}$ N,/m. It should be $(3.5\pm0.5)\times10^{1}$ N/m. The conclusions as drawn from the derivations and calculations do not change.

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